

Civil Engineering Database Keyword Index

The **Civil Engineering Database (CEDB)** is designed to provide free, easy bibliographic access to all ASCE publications. The database covers ASCE documents published since 1972. It provides access to all the journals, conference proceedings, books, standards, manuals, magazines, and newspapers. The index terms below were assigned to papers published in this journal during 2002 from a CEDB keyword list. The CEDB and keyword list can be accessed on the Web at <http://www.pubs.asce.org/cedbsrch.html>.

Acceleration

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Analysis and Modeling of Measured Delays at Isolated Signalized Intersections. — Ragab M. Mousa; 128(4), 347-54 (2002).

Variable Power Vehicle Dynamics Model for Estimating Truck Accelerations. — Hesham Rakha and Ivana Lucic; 128(5), 412-9 (2002).

Age factors

Factors Related to More Severe Older Driver Traffic Crash Injuries. — Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).

Aggregates

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Air quality

Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. — D. A. Niemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).

Airport runways

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Airport terminals

Airport Passenger Buildings: Efficiency through Shared Use of Facilities. — Richard de Neufville and Steven C. Belin; 128(3), 201-10 (2002).

Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).

Algorithms

Faster Frank-Wolfe Traffic Assignment with New Flow Update Scheme. — Anthony Chen, R. Jayakrishnan, and Wei K. Tsai; 128(1), 31-9 (2002).

Development of Coordinated Schedules using Genetic Algorithms. — Prabhat Shrivastava and S. L. Dhinra; 128(1), 89-96 (2002).

Incident Detection Algorithm using Wavelet Energy Representation of Traffic Patterns. — Asim Karim and Hojjat Adeli; 128(3), 232-42 (2002).

New Algorithm for a Multiclass Dynamic Traffic Assignment Model. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 323-35 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Alignment

Optimal Vertical Alignment Analysis for Highway Design. — T. F. Fwa, W. T. Chan, and Y. P. Sim; 128(5), 395-402 (2002).

Arterial highways

Estimating Heavy Vehicle Road Wear Costs for Bituminous-Surfaced Arterial Roads. — Tim C. Martin; 128(2), 103-10 (2002).

Asphalt cement

Reformulation of Runway Cements for Paving. — Ilan Ishai and Ruth Yuval; 128(2), 111-22 (2002).

Asphalt pavements

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Single-Event Cracking Temperature of Asphalt Pavements Directly from Bending Beam Rheometer Data. — Aroon Shenoy; 128(5), 465-71 (2002).

Asphalts

Analysis of Reflective Crack Control System Involving Reinforcing Grid over Base-Isolating Interlayer Mixture. — Jiwon Kim and William G. Buttlar; 128(4), 375-84 (2002).

Automobiles

Estimating Expected Price of Vehicles in a Transportation Microsimulation Modeling System. — Abolfazl Mohammadian and Eric J. Miller; 128(6), 537-41 (2002).

Bedding

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Benefit cost ratios

Profitability Evaluation of Intelligent Transport System Investments. — Pekka Leviäkangas and Jukka Lähesmaa; 128(3), 276-86 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Buses

Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).

Calibration

Calibrating Simulation Models for Advanced Traveler Information Systems/Advanced Traffic Management Systems Applications. — Yaser E. Hawas; 128(1), 80-8 (2002).

California

Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).

Canada

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Collapsible soils

Collapsible Soil Engineering in Highway Infrastructure Development. — S. L. Houston, W. N. Houston, and C. A. Lawrence; 128(3), 295-300 (2002).

Comparative studies

Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).

Computer simulation

Box-Beam Bursting Energy Absorbing Terminal. — John D. Reid, John R. Rohde, and Dean L. Sicking; 128(3), 287-94 (2002).

Computer software

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Concrete blocks

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Civil Engineering Database Keyword Index

The **Civil Engineering Database (CEDB)** is designed to provide free, easy bibliographic access to all ASCE publications. The database covers ASCE documents published since 1972. It provides access to all the journals, conference proceedings, books, standards, manuals, magazines, and newspapers. The index terms below were assigned to papers published in this journal during 2002 from a CEDB keyword list. The CEDB and keyword list can be accessed on the Web at <http://www.pubs.asce.org/cedbsrch.html>.

Acceleration

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Analysis and Modeling of Measured Delays at Isolated Signalized Intersections. — Ragab M. Mousa; 128(4), 347-54 (2002).

Variable Power Vehicle Dynamics Model for Estimating Truck Accelerations. — Hesham Rakha and Ivana Lucic; 128(5), 412-9 (2002).

Age factors

Factors Related to More Severe Older Driver Traffic Crash Injuries. — Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).

Aggregates

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Air quality

Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. — D. A. Niemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).

Airport runways

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Airport terminals

Airport Passenger Buildings: Efficiency through Shared Use of Facilities. — Richard de Neufville and Steven C. Belin; 128(3), 201-10 (2002).

Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).

Algorithms

Faster Frank-Wolfe Traffic Assignment with New Flow Update Scheme. — Anthony Chen, R. Jayakrishnan, and Wei K. Tsai; 128(1), 31-9 (2002).

Development of Coordinated Schedules using Genetic Algorithms. — Prabhat Shrivastava and S. L. Dhinra; 128(1), 89-96 (2002).

Incident Detection Algorithm using Wavelet Energy Representation of Traffic Patterns. — Asim Karim and Hojjat Adeli; 128(3), 232-42 (2002).

New Algorithm for a Multiclass Dynamic Traffic Assignment Model. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 323-35 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Alignment

Optimal Vertical Alignment Analysis for Highway Design. — T. F. Fwa, W. T. Chan, and Y. P. Sim; 128(5), 395-402 (2002).

Arterial highways

Estimating Heavy Vehicle Road Wear Costs for Bituminous-Surfaced Arterial Roads. — Tim C. Martin; 128(2), 103-10 (2002).

Asphalt cement

Reformulation of Runway Cements for Paving. — Ilan Ishai and Ruth Yuval; 128(2), 111-22 (2002).

Asphalt pavements

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Single-Event Cracking Temperature of Asphalt Pavements Directly from Bending Beam Rheometer Data. — Aroon Shenoy; 128(5), 465-71 (2002).

Asphalts

Analysis of Reflective Crack Control System Involving Reinforcing Grid over Base-Isolating Interlayer Mixture. — Jiwon Kim and William G. Buttlar; 128(4), 375-84 (2002).

Automobiles

Estimating Expected Price of Vehicles in a Transportation Microsimulation Modeling System. — Abolfazl Mohammadian and Eric J. Miller; 128(6), 537-41 (2002).

Bedding

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Benefit cost ratios

Profitability Evaluation of Intelligent Transport System Investments. — Pekka Leviäkangas and Jukka Lähesmaa; 128(3), 276-86 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Buses

Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).

Calibration

Calibrating Simulation Models for Advanced Traveler Information Systems/Advanced Traffic Management Systems Applications. — Yaser E. Hawas; 128(1), 80-8 (2002).

California

Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).

Canada

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Collapsible soils

Collapsible Soil Engineering in Highway Infrastructure Development. — S. L. Houston, W. N. Houston, and C. A. Lawrence; 128(3), 295-300 (2002).

Comparative studies

Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).

Computer simulation

Box-Beam Bursting Energy Absorbing Terminal. — John D. Reid, John R. Rohde, and Dean L. Sicking; 128(3), 287-94 (2002).

Computer software

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Concrete blocks

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Structural Behavior of Concrete Block Paving. II: Concrete Blocks. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 130-5 (2002).

Concrete pavements

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Structural Behavior of Concrete Block Paving. II: Concrete Blocks. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 130-5 (2002).

Combining Use of Rough Set and Artificial Neural Networks in Doweled-Pavement-Performance Modeling—A Hybrid Approach. — Nii O. Attah-Okine; 128(3), 270-5 (2002).

Configuration

Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).

Connections

Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).

Constraints

Multiclass Network Toll Design Problem with Social and Spatial Equity Constraints. — Hai Yang and Xiaoning Zhang; 128(5), 420-8 (2002).

Cost allocation

Estimating Heavy Vehicle Road Wear Costs for Bituminous-Surfaced Arterial Roads. — Tim C. Martin; 128(2), 103-10 (2002).

Cost benefit

Benefit-Cost Analysis of Added Bicycle Phase at Existing Signalized Intersection. — Matthew J. Korve and Debbie A. Niemeier; 128(1), 40-8 (2002).

Cost control

Cost-Based Space Estimation in Passenger Terminals. — Kittu Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).

Costs

Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).

Cracking

Analysis of Reflective Crack Control System Involving Reinforcing Grid over Base-Isolating Interlayer Mixture. — Jiwon Kim and William G. Buttlar; 128(4), 375-84 (2002).

Single-Event Cracking Temperature of Asphalt Pavements Directly from Bending Beam Rheometer Data. — Aroon Shenoy; 128(5), 465-71 (2002).

Evaluation of Low-Temperature Properties of HMA Mixtures. — Peter E. Sebaaly, Andrew Lake, and Jon Epps; 128(6), 578-86 (2002).

Data collection

Survey Design for Studying Transit Access Behavior in Mumbai City, India. — Rajat Rastogi and K. V. Krishna Rao; 128(1), 68-79 (2002).

Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. — D. A. Niemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).

Speech Recognition for On-Site Collection of License Plate Data: Exploratory Application Development and Testing. — Scott S. Washburn; 128(6), 481-9 (2002).

Decision making

Drivers' Parking Decisions: Advanced Parking Management Systems. — Amy E. Hester, Donald L. Fisher, and John Collura; 128(1), 49-57 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Design

Airport Passenger Buildings: Efficiency through Shared Use of Facilities. — Richard de Neufville and Steven C. Belin; 128(3), 201-10 (2002).

Driver behavior

Drivers' Parking Decisions: Advanced Parking Management Systems. — Amy E. Hester, Donald L. Fisher, and John Collura; 128(1), 49-57 (2002).

Factors Related to More Severe Older Driver Traffic Crash Injuries. — Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).

Speed Bumps May Induce Improper Drivers' Behavior: Case Study in Italy. — Massimiliano Pau; 128(5), 472-8 (2002).

Dynamic analysis

Efficient Dynamic Analysis of Multilayered System during Falling Weight Deflectometer Experiments. — Robert Liang and Sanping Zeng; 128(4), 366-74 (2002).

Dynamic models

Variable Power Vehicle Dynamics Model for Estimating Truck Accelerations. — Hesham Rakha and Ivana Lucic; 128(5), 412-9 (2002).

Emergency services

Simulation Model for Evaluating and Improving Effectiveness of Freeway Service Patrol Programs. — Raktim Pal and Kumares C. Sinha; 128(4), 355-65 (2002).

Emissions

Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. — D. A. Niemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Energy dissipation

Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).

Errors

Parallax Error in Video-Image Systems. — Zong Z. Tian, Michael D. Kyte, and Carroll J. Messer; 128(3), 218-23 (2002).

Estimation

Cost-Based Space Estimation in Passenger Terminals. — Kittu Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Evaluation

Field Evaluation of Lane Selection Strategies at Signalized Intersections. — Brandon L. Nevers and Nagui M. Rouphail; 128(3), 224-31 (2002).

Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).

Rational Method for Selecting Seismic Waves for Pavement Evaluation. — K. Tawfiq, J. Armaghani, and J. Sobanjo; 128(6), 550-8 (2002).

Experimentation

Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).

Fiber stabilization

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Financing

Modeling Road Maintenance Management and Financing. — José M. Vassallo and Rafael Izquierdo; 128(6), 559-67 (2002).

Flexible pavements

Optimum Flexible Pavement Life-Cycle Analysis Model. — Khaled A. Abaza; 128(6), 542-9 (2002).

Florida

Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).

New Methodology for Defining Level of Service at Toll Plazas. — Jack Klodzinski and Haitham M. Al-Deek; 128(2), 173-81 (2002).

Flow rates

Accuracy of Stopped Delay Measured by Stopped-Vehicle Counts Method. — Ragab M. Mousa; 128(5), 439-46 (2002).

Forecasting

Jointly Estimated Cross-Sectional Mode Choice Models: Specification and Forecast Performance. — Daniel A. Badoe and Bikram Wadhawan; 128(3), 259-69 (2002).

Freeze thaw

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Freight transportation

Revealed Preference Analysis of Commercial Vehicle Choice Process. — José Holguin-Veras; 128(4), 336-46 (2002).

Fuel consumption

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Geosynthetics

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Guardrails

Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).

Box-Beam Bursting Energy Absorbing Terminal. — John D. Reid, John R. Rohde, and Dean L. Sicking; 128(3), 287-94 (2002).

Highway construction

Collapsible Soil Engineering in Highway Infrastructure Development. — S. L. Houston, W. N. Houston, and C. A. Lawrence; 128(3), 295-300 (2002).

Highway design

Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Optimal Vertical Alignment Analysis for Highway Design. — T. F. Fwa, W. T. Chan, and Y. P. Sim; 128(5), 395-402 (2002).

Estimation of Parameters in Distribution of Headways in Roundabouts. — Ola Hagring; 128(5), 403-11 (2002).

Highway maintenance

Estimating Heavy Vehicle Road Wear Costs for Bituminous-Surfaced Arterial Roads. — Tim C. Martin; 128(2), 103-10 (2002).

Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Highway management

Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).

Highway safety

Simulation Model for Evaluating and Improving Effectiveness of Freeway Service Patrol Programs. — Raktim Pal and Kumares C. Sinha; 128(4), 355-65 (2002).

Highways

Improving Freeway Speed Estimates from Single-Loop Detectors. — Bruce R. Hellinga; 128(1), 58-67 (2002).

Incident Detection Algorithm using Wavelet Energy Representation of Traffic Patterns. — Asim Karim and Hoojat Adeli; 128(3), 232-42 (2002).

Hybrid methods

Combining Use of Rough Set and Artificial Neural Networks in Doweled-Pavement-Performance Modeling—A Hybrid Approach. — Nii O. Attoh-Okin; 128(3), 270-5 (2002).

Hydraulic gradients

Hydraulic Transport of Fine and Coarse Sediment Mixtures in Pipelines. — Stephen H. Scott and Steven R. Abt; 128(1), 1-8 (2002).

Ice control

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Imaging techniques

Parallax Error in Video-Image Systems. — Zong Z. Tian, Michael D. Kyte, and Carroll J. Messer; 128(3), 218-23 (2002).

Impact forces

Efficient Dynamic Analysis of Multilayered System during Falling Weight Deflectometer Experiments. — Robert Liang and Sanping Zeng; 128(4), 366-74 (2002).

India

Survey Design for Studying Transit Access Behavior in Mumbai City, India. — Rajat Rastogi and K. V. Krishna Rao; 128(1), 68-79 (2002).

Integrated systems

Integrated Adaptive-Signal Dynamic-Speed Control of Signalized Arterials. — Ghassan Abu-Lebdeh; 128(5), 447-51 (2002).

Intelligent transportation systems

Profitability Evaluation of Intelligent Transport System Investments. — Pekka Leviäkangas and Jukka Lähesmaa; 128(3), 276-86 (2002).

Integrated Adaptive-Signal Dynamic-Speed Control of Signalized Arterials. — Ghassan Abu-Lebdeh; 128(5), 447-51 (2002).

Intersections

Benefit-Cost Analysis of Added Bicycle Phase at Existing Signalized Intersection. — Matthew J. Korve and Debbie A. Niemeier; 128(1), 40-8 (2002).

Field Evaluation of Lane Selection Strategies at Signalized Intersections. — Brandon L. Nevers and Nagui M. Rouphail; 128(3), 224-31 (2002).

Analysis and Modeling of Measured Delays at Isolated Signalized Intersections. — Ragab M. Mousa; 128(4), 347-54 (2002).

Estimation of Parameters in Distribution of Headways in Roundabouts. — Ola Hagring; 128(5), 403-11 (2002).

Determination of Left-Turn Yellow Change and Red Clearance Interval. — Chiu Liu, Lei Yu, Khajohnsak Saksit, and Hong S. Oey; 128(5), 452-7 (2002).

Effect on Utilization of Auxiliary through Lanes of Downstream Right-Turn Volume. — Mohammed S. Tarawneh and Tarek M. Tarawneh; 128(5), 458-64 (2002).

Investments

Profitability Evaluation of Intelligent Transport System Investments. — Pekka Leviäkangas and Jukka Lähesmaa; 128(3), 276-86 (2002).

Italy

Speed Bumps May Induce Improper Drivers' Behavior: Case Study in Italy. — Massimiliano Pau; 128(5), 472-8 (2002).

Joints

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Kinematic wave theory

Numerical Study on Traffic Flow with Single Parameter State Equation. — Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

Layered systems

Efficient Dynamic Analysis of Multilayered System during Falling Weight Deflectometer Experiments. — Robert Liang and Sanping Zeng; 128(4), 366-74 (2002).

Left-turns

Determination of Left-Turn Yellow Change and Red Clearance Interval. — Chiu Liu, Lei Yu, Khajohnsak Saksit, and Hong S. Oey; 128(5), 452-7 (2002).

Licensing

Speech Recognition for On-Site Collection of License Plate Data: Exploratory Application Development and Testing. — Scott S. Washburn; 128(6), 481-9 (2002).

Life cycles

Optimum Flexible Pavement Life-Cycle Analysis Model. — Khaled A. Abaza; 128(6), 542-9 (2002).

Load distribution

Investigation of Tire Contact Stress Distributions on Pavement Response. — Raj V. Siddharthan, N. Krishnamenon, Mohey El-Mously, and Peter E. Sebaaly; 128(2), 136-44 (2002).

Maintenance

Optimum Flexible Pavement Life-Cycle Analysis Model. — Khaled A. Abaza; 128(6), 542-9 (2002).

Modeling Road Maintenance Management and Financing. — José M. Vassallo and Rafael Izquierdo; 128(6), 559-67 (2002).

Measurement

Parallax Error in Video-Image Systems. — Zong Z. Tian, Michael D. Kyte, and Carroll J. Messer; 128(3), 218-23 (2002).

Mixtures

Analysis of Reflective Crack Control System Involving Reinforcing Grid over Base-Isolating Interlayer Mixture. — Jiwon Kim and William G. Buttlar; 128(4), 375-84 (2002).

Model analysis

Dynamic Traffic Assignment with Rolling Horizon Implementation. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 314-22 (2002).

Models

Calibrating Simulation Models for Advanced Traveler Information Systems/Advanced Traffic Management Systems Applications. — Yaser E. Hawas; 128(1), 80-8 (2002).

Modeling Road Maintenance Management and Financing. — José M. Vassallo and Rafael Izquierdo; 128(6), 559-67 (2002).

Modeling Duration of Urban Traffic Congestion. — Antony Stathopoulos and Matthew G. Karlaftis; 128(6), 587-90 (2002).

Moisture

Reformulation of Asphalt Cements for Paving. — Ilan Ishai and Ruth Yuval; 128(2), 111-22 (2002).

Network design

Multiclass Network Toll Design Problem with Social and Spatial Equity Constraints. — Hai Yang and Xiaoning Zhang; 128(5), 420-8 (2002).

Neural networks

Combining Use of Rough Set and Artificial Neural Networks in Doweled-Pavement-Performance Modeling—A Hybrid Approach. — Nii O. Attah-Okine; 128(3), 270-5 (2002).

Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).

Nevada

Evaluation of Low-Temperature Properties of HMA Mixtures. — Peter E. Sebaaly, Andrew Lake, and Jon Epps; 128(6), 578-86 (2002).

Numerical analysis

Numerical Study on Traffic Flow with Single Parameter State Equation. — Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

Optimization

Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).

Cost-Based Space Estimation in Passenger Terminals. — Kittu Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Parameters

Numerical Study on Traffic Flow with Single Parameter State Equation. — Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

Estimation of Parameters in Distribution of Headways in Roundabouts. — Ola Hagring; 128(5), 403-11 (2002).

Parking

Drivers' Parking Decisions: Advanced Parking Management Systems. — Amy E. Hester, Donald L. Fisher, and John Collura; 128(1), 49-57 (2002).

Passengers

Cost-Based Space Estimation in Passenger Terminals. — Kittu Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Airport Passenger Buildings: Efficiency through Shared Use of Facilities. — Richard de Neufville and Steven C. Belin; 128(3), 201-10 (2002).

Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).

Pavement deterioration

Estimating Heavy Vehicle Road Wear Costs for Bituminous-Surfaced Arterial Roads. — Tim C. Martin; 128(2), 103-10 (2002).

Evaluation of Low-Temperature Properties of HMA Mixtures. — Peter E. Sebaaly, Andrew Lake, and Jon Epps; 128(6), 578-86 (2002).

Pavement management

Optimum Flexible Pavement Life-Cycle Analysis Model. — Khaled A. Abaza; 128(6), 542-9 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Pavements

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Reformulation of Asphalt Cements for Paving. — Ilan Ishai and Ruth Yuval; 128(2), 111-22 (2002).

Investigation of Tire Contact Stress Distributions on Pavement Response. — Raj V. Siddharthan, N. Krishnamenon, Mohey El-Mously, and Peter E. Sebaaly; 128(2), 136-44 (2002).

Efficient Dynamic Analysis of Multilayered System during Falling Weight Deflectometer Experiments. — Robert Liang and Sanping Zeng; 128(4), 366-74 (2002).

Analysis of Reflective Crack Control System Involving Reinforcing Grid over Base-Isolating Interlayer Mixture. — Jiwon Kim and William G. Buttlar; 128(4), 375-84 (2002).

Rational Method for Selecting Seismic Waves for Pavement Evaluation. — K. Tawfiq, J. Armaghani, and J. Sobanjo; 128(6), 550-8 (2002).

Consideration of Fractals Potential in Pavement Skid Resistance Evaluation. — A. G. Kokkalis, G. H. Tsohos, and O. K. Panagoulis; 128(6), 591-5 (2002).

Performance

Combining Use of Rough Set and Artificial Neural Networks in Doweled-Pavement-Performance Modeling—A Hybrid Approach. — Nii O. Attah-Okine; 128(3), 270-5 (2002).

Performance evaluation

Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).

Performance Evaluation of Short-Term Time-Series Traffic Prediction Model. — Sherif Ishak and Haitham M. Al-Deek; 128(6), 490-8 (2002).

Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).

Pipelines

Hydraulic Transport of Fine and Coarse Sediment Mixtures in Pipelines. — Stephen H. Scott and Steven R. Abt; 128(1), 1-8 (2002).

Polyethylene

Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).

Predictions

Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).

Performance Evaluation of Short-Term Time-Series Traffic Prediction Model. — Sherif Ishak and Haitham M. Al-Deek; 128(6), 490-8 (2002).

Pricing

Multiclass Network Toll Design Problem with Social and Spatial Equity Constraints. — Hai Yang and Xiaoning Zhang; 128(5), 420-8 (2002).

Estimating Expected Price of Vehicles in a Transportation Microsimulation Modeling System. — Abolfazl Mohammadian and Eric J. Miller; 128(6), 537-41 (2002).

Profits

Profitability Evaluation of Intelligent Transport System Investments. — Pekka Leviäkangas and Jukka Lähesmaa; 128(3), 276-86 (2002).

Public transportation

Development of Coordinated Schedules using Genetic Algorithms. — Prabhat Shrivastava and S. L. Dhingra; 128(1), 89-96 (2002).

Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).

Rational functions

Rational Method for Selecting Seismic Waves for Pavement Evaluation. — K. Tawfiq, J. Armaghani, and J. Sobanjo; 128(6), 550-8 (2002).

Recycling

Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).

Rehabilitation

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Optimum Flexible Pavement Life-Cycle Analysis Model. — Khaled A. Abaza; 128(6), 542-9 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Reinforcement

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Repeated loads

Structural Behavior of Concrete Block Paving. II: Concrete Blocks. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 130-5 (2002).

Road surface

Consideration of Fractals Potential in Pavement Skid Resistance Evaluation. — A. G. Kokkalis, G. H. Tsohos, and O. K. Panagouli; 128(6), 591-5 (2002).

Roads

Modeling Road Maintenance Management and Financing. — José M. Vassallo and Rafael Izquierdo; 128(6), 559-67 (2002).

Roadside safety

Box-Beam Bursting Energy Absorbing Terminal. — John D. Reid, John R. Rohde, and Dean L. Sicking; 128(3), 287-94 (2002).

Sand

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Scheduling

Development of Coordinated Schedules using Genetic Algorithms. — Prabhat Shrivastava and S. L. Dhringra; 128(1), 89-96 (2002).

Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).

Sediment transport

Hydraulic Transport of Fine and Coarse Sediment Mixtures in Pipelines. — Stephen H. Scott and Steven R. Abt; 128(1), 1-8 (2002).

Seismic waves

Rational Method for Selecting Seismic Waves for Pavement Evaluation. — K. Tawfiq, J. Armaghani, and J. Sobanjo; 128(6), 550-8 (2002).

Shipping

Revealed Preference Analysis of Commercial Vehicle Choice Process. — José Holguín-Veras; 128(4), 336-46 (2002).

Simulation

Calibrating Simulation Models for Advanced Traveler Information Systems/Advanced Traffic Management Systems Applications. — Yaser E. Hawas; 128(1), 80-8 (2002).

New Methodology for Defining Level of Service at Toll Plazas. — Jack Klodzinski and Haitham M. Al-Deek; 128(2), 173-81 (2002).

Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).

Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).

Simulation models

Simulation Model for Evaluating and Improving Effectiveness of Freeway Service Patrol Programs. — Raktim Pal and Kumares C. Sinha; 128(4), 355-65 (2002).

Estimating Expected Price of Vehicles in a Transportation Microsimulation Modeling System. — Abolfazl Mohammadian and Eric J. Miller; 128(6), 537-41 (2002).

Skid resistance

Consideration of Fractals Potential in Pavement Skid Resistance Evaluation. — A. G. Kokkalis, G. H. Tsohos, and O. K. Panagouli; 128(6), 591-5 (2002).

Social factors

Multiclass Network Toll Design Problem with Social and Spatial Equity Constraints. — Hai Yang and Xiaoning Zhang; 128(5), 420-8 (2002).

Soil tests

Collapsible Soil Engineering in Highway Infrastructure Development. — S. L. Houston, W. N. Houston, and C. A. Lawrence; 128(3), 295-300 (2002).

Spacing

Cost-Based Space Estimation in Passenger Terminals. — Kitti Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Spain

Modeling Road Maintenance Management and Financing. — José M. Vassallo and Rafael Izquierdo; 128(6), 559-67 (2002).

Speech recognition

Speech Recognition for On-Site Collection of License Plate Data: Exploratory Application Development and Testing. — Scott S. Washburn; 128(6), 481-9 (2002).

Speed

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Structural behavior

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Structural Behavior of Concrete Block Paving. II: Concrete Blocks. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 130-5 (2002).

Surveys

Survey Design for Studying Transit Access Behavior in Mumbai City, India. — Rajat Rastogi and K. V. Krishna Rao; 128(1), 68-79 (2002).

Jointly Estimated Cross-Sectional Mode Choice Models: Specification and Forecast Performance. — Daniel A. Badoe and Bikram Wadhawan; 128(3), 259-69 (2002).

Temperature

Evaluation of Low-Temperature Properties of HMA Mixtures. — Peter E. Sebaaly, Andrew Lake, and Jon Epps; 128(6), 578-86 (2002).

Temperature effects

Single-Event Cracking Temperature of Asphalt Pavements Directly from Bending Beam Rheometer Data. — Aroon Shenoy; 128(5), 465-71 (2002).

Terminal facilities

Cost-Based Space Estimation in Passenger Terminals. — Kitti Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Three-dimensional analysis

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Time series analysis

Performance Evaluation of Short-Term Time-Series Traffic Prediction Model. — Sherif Ishak and Haitham M. Al-Deek; 128(6), 490-8 (2002).

Toll roads

New Methodology for Defining Level of Service at Toll Plazas. — Jack Klodzinski and Haitham M. Al-Deek; 128(2), 173-81 (2002).

Traffic

Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. — D. A. Niemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).

Performance Evaluation of Short-Term Time-Series Traffic Prediction Model. — Sherif Ishak and Haitham M. Al-Deek; 128(6), 490-8 (2002).

Traffic accidents

Incident Detection Algorithm using Wavelet Energy Representation of Traffic Patterns. — Asim Karim and Hojjat Adeli; 128(3), 232-42 (2002).

Factors Related to More Severe Older Driver Traffic Crash Injuries. — Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).

Simulation Model for Evaluating and Improving Effectiveness of Freeway Service Patrol Programs. — Raktim Pal and Kumares C. Sinha; 128(4), 355-65 (2002).

Traffic analysis

Speed Bumps May Induce Improper Drivers' Behavior: Case Study in Italy. — Massimiliano Pau; 128(5), 472-8 (2002).

Traffic assignment

Faster Frank-Wolfe Traffic Assignment with New Flow Update Scheme. — Anthony Chen, R. Jayakrishnan, and Wei K. Tsai; 128(1), 31-9 (2002).

Calibrating Simulation Models for Advanced Traveler Information Systems/Advanced Traffic Management Systems Applications. — Yaser E. Hawas; 128(1), 80-8 (2002).

Dynamic Traffic Assignment with Rolling Horizon Implementation. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 314-22 (2002).

New Algorithm for a Multiclass Dynamic Traffic Assignment Model. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 323-35 (2002).

Traffic characteristics

Field Evaluation of Lane Selection Strategies at Signalized Intersections. — Brandon L. Nevers and Nagui M. Rouphail; 128(3), 224-31 (2002).

Traffic congestion

Multiclass Network Toll Design Problem with Social and Spatial Equity Constraints. — Hai Yang and Xiaoning Zhang; 128(5), 420-8 (2002).

Modeling Duration of Urban Traffic Congestion. — Antony Stathopoulos and Matthew G. Karlaftis; 128(6), 587-90 (2002).

Traffic delay

Analysis and Modeling of Measured Delays at Isolated Signalized Intersections. — Ragab M. Mousa; 128(4), 347-54 (2002).

Accuracy of Stopped Delay Measured by Stopped-Vehicle Counts Method. — Ragab M. Mousa; 128(5), 439-46 (2002).

Effect on Utilization of Auxiliary through Lanes of Downstream Right-Turn Volume. — Mohammed S. Tarawneh and Tarek M. Tarawneh; 128(5), 458-64 (2002).

Traffic flow

Numerical Study on Traffic Flow with Single Parameter State Equation. — Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

Field Evaluation of Lane Selection Strategies at Signalized Intersections. — Brandon L. Nevers and Nagui M. Rouphail; 128(3), 224-31 (2002).

Estimation of Parameters in Distribution of Headways in Roundabouts. — Ola Hagring; 128(5), 403-11 (2002).

Traffic management

Improving Freeway Speed Estimates from Single-Loop Detectors. — Bruce R. Hellinga; 128(1), 58-67 (2002).

Incident Detection Algorithm using Wavelet Energy Representation of Traffic Patterns. — Asim Karim and Hojjat Adeli; 128(3), 232-42 (2002).

Speech Recognition for On-Site Collection of License Plate Data: Exploratory Application Development and Testing. — Scott S. Washburn; 128(6), 481-9 (2002).

Traffic models

Dynamic Traffic Assignment with Rolling Horizon Implementation. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 314-22 (2002).

New Algorithm for a Multiclass Dynamic Traffic Assignment Model. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 323-35 (2002).

Traffic signals

Field Evaluation of Lane Selection Strategies at Signalized Intersections. — Brandon L. Nevers and Nagui M. Rouphail; 128(3), 224-31 (2002).

Analysis and Modeling of Measured Delays at Isolated Signalized Intersections. — Ragab M. Mousa; 128(4), 347-54 (2002).

Accuracy of Stopped Delay Measured by Stopped-Vehicle Counts Method. — Ragab M. Mousa; 128(5), 439-46 (2002).

Integrated Adaptive-Signal Dynamic-Speed Control of Signalized Arterials. — Ghassan Abu-Lebdeh; 128(5), 447-51 (2002).

Determination of Left-Turn Yellow Change and Red Clearance Interval. — Chiu Liu, Lei Yu, Khajohnsak Saksit, and Hong S. Oey; 128(5), 452-7 (2002).

Effect on Utilization of Auxiliary through Lanes of Downstream Right-Turn Volume. — Mohammed S. Tarawneh and Tarek M. Tarawneh; 128(5), 458-64 (2002).

Traffic signs

Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).

Traffic speed

Improving Freeway Speed Estimates from Single-Loop Detectors. — Bruce R. Hellinga; 128(1), 58-67 (2002).

Integrated Adaptive-Signal Dynamic-Speed Control of Signalized Arterials. — Ghassan Abu-Lebdeh; 128(5), 447-51 (2002).

Speed Bumps May Induce Improper Drivers' Behavior: Case Study in Italy. — Massimiliano Pau; 128(5), 472-8 (2002).

Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).

Traffic surveillance

Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).

Traffic volume

Effect on Utilization of Auxiliary through Lanes of Downstream Right-Turn Volume. — Mohammed S. Tarawneh and Tarek M. Tarawneh; 128(5), 458-64 (2002).

Transportation engineering

Parallax Error in Video-Image Systems. — Zong Z. Tian, Michael D. Kyte, and Carroll J. Messer; 128(3), 218-23 (2002).

Transportation planning

Faster Frank-Wolfe Traffic Assignment with New Flow Update Scheme. — Anthony Chen, R. Jayakrishnan, and Wei K. Tsai; 128(1), 31-9 (2002).

Survey Design for Studying Transit Access Behavior in Mumbai City, India. — Rajat Rastogi and K. V. Krishna Rao; 128(1), 68-79 (2002).

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Travel demand

Estimating Expected Price of Vehicles in a Transportation Microsimulation Modeling System. — Abolfazl Mohammadian and Eric J. Miller; 128(6), 537-41 (2002).

Travel modes

Jointly Estimated Cross-Sectional Mode Choice Models: Specification and Forecast Performance. — Daniel A. Badoe and Bikram Wadhawan; 128(3), 259-69 (2002).

Travel time

Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).

Speech Recognition for On-Site Collection of License Plate Data: Exploratory Application Development and Testing. — Scott S. Washburn; 128(6), 481-9 (2002).

Performance Evaluation of Short-Term Time-Series Traffic Prediction Model. — Sherif Ishak and Haitham M. Al-Deek; 128(6), 490-8 (2002).

Trucks

Estimating Heavy Vehicle Road Wear Costs for Bituminous-Surfaced Arterial Roads. — Tim C. Martin; 128(2), 103-10 (2002).

Revealed Preference Analysis of Commercial Vehicle Choice Process. — José Holguín-Veras; 128(4), 336-46 (2002).

Variable Power Vehicle Dynamics Model for Estimating Truck Accelerations. — Hesham Rakha and Ivana Lucic; 128(5), 412-9 (2002).

Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).

Urban areas

Jointly Estimated Cross-Sectional Mode Choice Models: Specification and Forecast Performance. — Daniel A. Badoe and Bikram Wadhawan; 128(3), 259-69 (2002).

Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Modeling Duration of Urban Traffic Congestion. — Antony Stathopoulos and Matthew G. Karlaftis; 128(6), 587-90 (2002).

Vehicle impact forces

Investigation of Tire Contact Stress Distributions on Pavement Response. — Raj V. Siddharthan, N. Krishnamenon, Mohey El-Mously, and Peter E. Sebaaly; 128(2), 136-44 (2002).

Vehicles

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Vertical angles

Optimal Vertical Alignment Analysis for Highway Design. — T. F. Fwa, W. T. Chan, and Y. P. Sim; 128(5), 395-402 (2002).

Weight

Efficient Dynamic Analysis of Multilayered System during Falling Weight Deflectometer Experiments. — Robert Liang and Sanping Zeng; 128(4), 366-74 (2002).

Workspace

Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).

Author Index

- Abaza, Khaled A.**
Optimum Flexible Pavement Life-Cycle Analysis Model. — Khaled A. Abaza; 128(6), 542-9 (2002).
- Abd El Halim, A. O.**
Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).
- Abt, Steven R.**
Hydraulic Transport of Fine and Coarse Sediment Mixtures in Pipelines. — Stephen H. Scott and Steven R. Abt; 128(1), 1-8 (2002).
- Abu-Lebdeh, Ghassan**
Integrated Adaptive-Signal Dynamic-Speed Control of Signalized Arterials. — Ghassan Abu-Lebdeh; 128(5), 447-51 (2002).
- Adeli, Hojjat**
Comparison of Fuzzy-Wavelet Radial Basis Function Neural Network Freeway Incident Detection Model with California Algorithm. — Asim Karim and Hojjat Adeli; 128(1), 21-30 (2002).
Incident Detection Algorithm using Wavelet Energy Representation of Traffic Patterns. — Asim Karim and Hojjat Adeli; 128(3), 232-42 (2002).
- Ahn, Kyoungho**
Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).
- Al-Deek, Haitham M.**
New Methodology for Defining Level of Service at Toll Plazas. — Jack Klodzinski and Haitham M. Al-Deek; 128(2), 173-81 (2002).
Performance Evaluation of Short-Term Time-Series Traffic Prediction Model. — Sherif Ishak and Haitham M. Al-Deek; 128(6), 490-8 (2002).
- Alsaiddi, Emadeddin**
Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaiddi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).
Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaiddi, and Richard Darin Ellis; 128(6), 509-18 (2002).
- Antunes, António**
Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).
- Armaghani, J.**
Rational Method for Selecting Seismic Waves for Pavement Evaluation. — K. Tawfiq, J. Armaghani, and J. Sobanjo; 128(6), 550-8 (2002).
- Atahan, Ali O.**
Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).
- Attoh-Okin, Nii O.**
Combining Use of Rough Set and Artificial Neural Networks in Doweled-Pavement-Performance Modeling—A Hybrid Approach. — Nii O. Attoh-Okin; 128(3), 270-5 (2002).
- Badoe, Daniel A.**
Jointly Estimated Cross-Sectional Mode Choice Models: Specification and Forecast Performance. — Daniel A. Badoe and Bikram Wadhawan; 128(3), 259-69 (2002).
- Bekheet, W.**
Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).
- Belin, Steven C.**
Airport Passenger Buildings: Efficiency through Shared Use of Facilities. — Richard de Neufville and Steven C. Belin; 128(3), 201-10 (2002).
Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).
- Bligh, Roger P.**
Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).
- Bullock, Darcy**
Development of Transportation Engineering Research, Education, and Practice in a Changing Civil Engineering World. — Kumares C. Sinha, Darcy Bullock, Chris T. Hendrickson, Herbert S. Levinson, Richard W. Lyles, A. Essam Radwan, and Zongzhi Li; 128(4), 301-13 (2002).
- Buttler, William G.**
Analysis of Reflective Crack Control System Involving Reinforcing Grid over Base-Isolating Interlayer Mixture. — Jiwon Kim and William G. Buttler; 128(4), 375-84 (2002).
- Chan, W. T.**
Optimal Vertical Alignment Analysis for Highway Design. — T. F. Fwa, W. T. Chan, and Y. P. Sim; 128(5), 395-402 (2002).
- Chandrasekar, P.**
Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).
- Chen, Anthony**
Faster Frank-Wolfe Traffic Assignment with New Flow Update Scheme. — Anthony Chen, R. Jayakrishnan, and Wei K. Tsai; 128(1), 31-9 (2002).
- Chen, Yuh-Jyh**
Closure to "Soil Friction Restraint of Oblique Pipelines in Loose Sand" by Tung-Wen Hsu, Yuh-Jyh Chen, and Chun-Yin Wu. — Tung-Wen Hsu, Yuh-Jyh Chen, and Chun-Yin Wu; 128(2), 199-200 (2002).
- Chien, Steven**
Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).
- Chien, Steven I-Jy**
Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).
- Chin, Hoong Chor**
Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).
- Cho, Seongkil**
Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).
- Collura, John**
Drivers' Parking Decisions: Advanced Parking Management Systems. — Amy E. Hester, Donald L. Fisher, and John Collura; 128(1), 49-57 (2002).
- de Barros, Alexandre G.**
Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).
- de Neufville, Richard**
Airport Passenger Buildings: Efficiency through Shared Use of Facilities. — Richard de Neufville and Steven C. Belin; 128(3), 201-10 (2002).
Optimal Configuration of Airport Passenger Buildings for Travelers. — Richard de Neufville, Alexandre G. de Barros, and Steven C. Belin; 128(3), 211-7 (2002).
- Dhingra, S. L.**
Development of Coordinated Schedules using Genetic Algorithms. — Prabhat Shrivastava and S. L. Dhingra; 128(1), 89-96 (2002).
- Ding, Yuqing**
Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).
- Easa, Said M.**
Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Ellis, Richard Darin

Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. — Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

El-Mously, Mohey

Investigation of Tire Contact Stress Distributions on Pavement Response. — Raj V. Siddharthan, N. Krishnamenon, Mohey El-Mously, and Peter E. Sebaaly; 128(2), 136-44 (2002).

Epps, Jon

Evaluation of Low-Temperature Properties of HMA Mixtures. — Peter E. Sebaaly, Andrew Lake, and Jon Epps; 128(6), 578-86 (2002).

Farha, M. H.

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Fay, L.

Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. —D. A. Niemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).

Ferreira, Adelino

Probabilistic Segment-linked Pavement Management Optimization Model. —Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).

Fisher, Donald L.

Drivers' Parking Decisions: Advanced Parking Management Systems. —Amy E. Hester, Donald L. Fisher, and John Collura; 128(1), 49-57 (2002).

Fwa, T. F.

Optimal Vertical Alignment Analysis for Highway Design. —T. F. Fwa, W. T. Chan, and Y. P. Sim; 128(5), 395-402 (2002).

Ghosh, Ashok Kumar

Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. —Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).

Structural Behavior of Concrete Block Paving. II: Concrete Blocks. —Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 130-5 (2002).

Hagring, Ola

Estimation of Parameters in Distribution of Headways in Roundabouts. —Ola Hagring; 128(5), 403-11 (2002).

Hallmark, Shauna L.

Factors Related to More Severe Older Driver Traffic Crash Injuries. —Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).

Hassan, Y.

Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. —Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Hassan, Yasser

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Hawas, Yaser E.

Calibrating Simulation Models for Advanced Traveler Information Systems/Advanced Traffic Management Systems Applications. —Yaser E. Hawas; 128(1), 80-8 (2002).

Hellinga, Bruce R.

Improving Freeway Speed Estimates from Single-Loop Detectors. —Bruce R. Hellinga; 128(1), 58-67 (2002).

Hendrickson, Chris T.

Development of Transportation Engineering Research, Education, and Practice in a Changing Civil Engineering World. —Kumares C. Sinha, Darcy Bullock, Chris T. Hendrickson, Herbert S. Levinson, Richard W. Lyles, A. Essam Radwan, and Zongzhi Li; 128(4), 301-13 (2002).

Hester, Amy E.

Drivers' Parking Decisions: Advanced Parking Management Systems. —Amy E. Hester, Donald L. Fisher, and John Collura; 128(1), 49-57 (2002).

Holguín-Veras, José

Revealed Preference Analysis of Commercial Vehicle Choice Process. —José Holguín-Veras; 128(4), 336-46 (2002).

Houston, S. L.

Collapsible Soil Engineering in Highway Infrastructure Development. —S. L. Houston, W. N. Houston, and C. A. Lawrence; 128(3), 295-300 (2002).

Houston, W. N.

Collapsible Soil Engineering in Highway Infrastructure Development. —S. L. Houston, W. N. Houston, and C. A. Lawrence; 128(3), 295-300 (2002).

Hsu, Tung-Wen

Closure to "Soil Friction Restraint of Oblique Pipelines in Loose Sand" by Tung-Wen Hsu, Yuh-Jyh Chen, and Chun-Yin Wu. —Tung-Wen Hsu, Yuh-Jyh Chen, and Chun-Yin Wu; 128(2), 199-200 (2002).

Ishai, Ilan

Reformulation of Asphalt Cements for Paving. —Ilan Ishai and Ruth Yuval; 128(2), 111-22 (2002).

Ishak, Sherif

Performance Evaluation of Short-Term Time-Series Traffic Prediction Model. —Sherif Ishak and Haitham M. Al-Deek; 128(6), 490-8 (2002).

Izquierdo, Rafael

Modeling Road Maintenance Management and Financing. —José M. Vassallo and Rafael Izquierdo; 128(6), 559-67 (2002).

Jayakrishnan, R.

Faster Frank-Wolfe Traffic Assignment with New Flow Update Scheme. —Anthony Chen, R. Jayakrishnan, and Wei K. Tsai; 128(1), 31-9 (2002).

Jiang, Rui

Numerical Study on Traffic Flow with Single Parameter State Equation. —Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

Karim, Asim

Comparison of Fuzzy-Wavelet Radial Basis Function Neural Network Freeway Incident Detection Model with California Algorithm. —Asim Karim and Hojjat Adeli; 128(1), 21-30 (2002). Incident Detection Algorithm using Wavelet Energy Representation of Traffic Patterns. —Asim Karim and Hojjat Adeli; 128(3), 232-42 (2002).

Karlaftis, Matthew G.

Modeling Duration of Urban Traffic Congestion. —Antony Stathopoulos and Matthew G. Karlaftis; 128(6), 587-90 (2002).

Khasnabis, Snehamay

Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. —Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).

Optimal Allocation of Resources To Meet Transit Fleet Requirements. —Snehamay Khasnabis, Emadeddin Alsaidi, and Richard Darin Ellis; 128(6), 509-18 (2002).

Khattak, Aemal J.

Factors Related to More Severe Older Driver Traffic Crash Injuries. —Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).

Kilpala, Heli K.

Cost-Based Space Estimation in Passenger Terminals. —Kitti Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Kim, Jiwon

Analysis of Reflective Crack Control System Involving Reinforcing Grid over Base-Isolating Interlayer Mixture. —Jiwon Kim and William G. Buttlar; 128(4), 375-84 (2002).

Klodzinski, Jack

New Methodology for Defining Level of Service at Toll Plazas. —Jack Klodzinski and Haitham M. Al-Deek; 128(2), 173-81 (2002).

Kokkalis, A. G.

Consideration of Fractals Potential in Pavement Skid Resistance Evaluation. —A. G. Kokkalis, G. H. Tsohos, and O. K. Panagoulis; 128(6), 591-5 (2002).

Korve, Matthew J.

Benefit-Cost Analysis of Added Bicycle Phase at Existing Signalized Intersection. —Matthew J. Korve and Debbie A. Niemeier; 128(1), 40-8 (2002).

Krishnamenon, N.

Investigation of Tire Contact Stress Distributions on Pavement Response. —Raj V. Siddharthan, N. Krishnamenon, Mohey El-Mously, and Peter E. Sebaaly; 128(2), 136-44 (2002).

Kyte, Michael D.

Parallax Error in Video-Image Systems. —Zong Z. Tian, Michael D. Kyte, and Carroll J. Messer; 128(3), 218-23 (2002).

Lähesmaa, Jukka

Profitability Evaluation of Intelligent Transport System Investments. —Pekka Leviäkangas and Jukka Lähesmaa; 128(3), 276-86 (2002).

Lake, Andrew

Evaluation of Low-Temperature Properties of HMA Mixtures. —Peter E. Sebaaly, Andrew Lake, and Jon Epps; 128(6), 578-86 (2002).

- Lawrence, C. A.**
Collapsible Soil Engineering in Highway Infrastructure Development. — S. L. Houston, W. N. Houston, and C. A. Lawrence; 128(3), 295-300 (2002).
- Lee, Der-Horng**
Dynamic Traffic Assignment with Rolling Horizon Implementation. — Bin Ran, Der-Horng Lee, and Michael Seong-II Shin; 128(4), 314-22 (2002).
- New Algorithm for a Multiclass Dynamic Traffic Assignment Model. — Bin Ran, Der-Horng Lee, and Michael Seong-II Shin; 128(4), 323-35 (2002).
- Leviäkangas, Pekka**
Profitability Evaluation of Intelligent Transport System Investments. — Pekka Leviäkangas and Jukka Lähesmaa; 128(3), 276-86 (2002).
- Levinson, Herbert S.**
Development of Transportation Engineering Research, Education, and Practice in a Changing Civil Engineering World. — Kumares C. Sinha, Darcy Bullock, Chris T. Hendrickson, Herbert S. Levinson, Richard W. Lyles, A. Essam Radwan, and Zongzhi Li; 128(4), 301-13 (2002).
- Li, Zongzhi**
Development of Transportation Engineering Research, Education, and Practice in a Changing Civil Engineering World. — Kumares C. Sinha, Darcy Bullock, Chris T. Hendrickson, Herbert S. Levinson, Richard W. Lyles, A. Essam Radwan, and Zongzhi Li; 128(4), 301-13 (2002).
- Liang, Robert**
Efficient Dynamic Analysis of Multilayered System during Falling Weight Deflectometer Experiments. — Robert Liang and Sanping Zeng; 128(4), 366-74 (2002).
- Liu, Chiu**
Determination of Left-Turn Yellow Change and Red Clearance Interval. — Chiu Liu, Lei Yu, Khajohnsak Saksit, and Hong S. Oey; 128(5), 452-7 (2002).
- Liu, Libo**
Comparative Study of Two Techniques of Transit Performance Assessment: AHP and GAT. — Snehamay Khasnabis, Emadeddin Alsaidi, Libo Liu, and Richard Darin Ellis; 128(6), 499-508 (2002).
- Long Cheu, Ruey**
Simulation Evaluation of Route-Based Control of Bus Operations. — P. Chandrasekar, Ruey Long Cheu, and Hoong Chor Chin; 128(6), 519-27 (2002).
- Lucic, Ivana**
Variable Power Vehicle Dynamics Model for Estimating Truck Accelerations. — Hesham Rakha and Ivana Lucic; 128(5), 412-9 (2002).
- Lyles, Richard W.**
Development of Transportation Engineering Research, Education, and Practice in a Changing Civil Engineering World. — Kumares C. Sinha, Darcy Bullock, Chris T. Hendrickson, Herbert S. Levinson, Richard W. Lyles, A. Essam Radwan, and Zongzhi Li; 128(4), 301-13 (2002).
- Martin, Tim C.**
Estimating Heavy Vehicle Road Wear Costs for Bituminous-Surfaced Arterial Roads. — Tim C. Martin; 128(2), 103-10 (2002).
- Messer, Carroll J.**
Parallax Error in Video-Image Systems. — Zong Z. Tian, Michael D. Kyte, and Carroll J. Messer; 128(3), 218-23 (2002).
- Mezger, Daniel B.**
Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).
- Miller, Eric J.**
Estimating Expected Price of Vehicles in a Transportation Microsimulation Modeling System. — Abolfazl Mohammadian and Eric J. Miller; 128(6), 537-41 (2002).
- Minocha, Vijay K.**
Discussion of "Model for Determining Optimum Bus-Stop Spacing in Urban Areas" by Anthony A. Saka. — Vijay K. Minocha; 128(6), 596 (2002).
- Mohammadian, Abolfazl**
Estimating Expected Price of Vehicles in a Transportation Microsimulation Modeling System. — Abolfazl Mohammadian and Eric J. Miller; 128(6), 537-41 (2002).
- Moore, James E., II**
Feasibility of Using Freeway Service Patrol Trucks as Probe Vehicles. — James E. Moore, II, Seongkil Cho, and Daniel B. Mezger; 128(6), 528-36 (2002).
- Mousa, Ragab M.**
Analysis and Modeling of Measured Delays at Isolated Signalized Intersections. — Ragab M. Mousa; 128(4), 347-54 (2002).
- Accuracy of Stopped Delay Measured by Stopped-Vehicle Counts Method. — Ragab M. Mousa; 128(5), 439-46 (2002).
- Nevers, Brandon L.**
Field Evaluation of Lane Selection Strategies at Signalized Intersections. — Brandon L. Nevers and Nagui M. Roupail; 128(3), 224-31 (2002).
- Niemeier, D. A.**
Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. — D. A. Niemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).
- Niemeier, Debbie A.**
Benefit-Cost Analysis of Added Bicycle Phase at Existing Signalized Intersection. — Matthew J. Korve and Debbie A. Niemeier; 128(1), 40-8 (2002).
- Oey, Hong S.**
Determination of Left-Turn Yellow Change and Red Clearance Interval. — Chiu Liu, Lei Yu, Khajohnsak Saksit, and Hong S. Oey; 128(5), 452-7 (2002).
- Pal, Raktim**
Simulation Model for Evaluating and Improving Effectiveness of Freeway Service Patrol Programs. — Raktim Pal and Kumares C. Sinha; 128(4), 355-65 (2002).
- Panagouli, O. K.**
Consideration of Fractals Potential in Pavement Skid Resistance Evaluation. — A. G. Kokkalis, G. H. Tsohos, and O. K. Panagouli; 128(6), 591-5 (2002).
- Panda, Bikasha Chandra**
Structural Behavior of Concrete Block Paving. I: Sand in Bed and Joints. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 123-9 (2002).
- Structural Behavior of Concrete Block Paving. II: Concrete Blocks. — Bikasha Chandra Panda and Ashok Kumar Ghosh; 128(2), 130-5 (2002).
- Pau, Massimiliano**
Speed Bumps May Induce Improper Drivers' Behavior: Case Study in Italy. — Massimiliano Pau; 128(5), 472-8 (2002).
- Pawlovich, Michael D.**
Factors Related to More Severe Older Driver Traffic Crash Injuries. — Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).
- Picado-Santos, Luís**
Probabilistic Segment-linked Pavement Management Optimization Model. — Adelino Ferreira, António Antunes, and Luís Picado-Santos; 128(6), 568-77 (2002).
- Pinelli, Jean-Paul**
Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).
- Radwan, A. Essam**
Development of Transportation Engineering Research, Education, and Practice in a Changing Civil Engineering World. — Kumares C. Sinha, Darcy Bullock, Chris T. Hendrickson, Herbert S. Levinson, Richard W. Lyles, A. Essam Radwan, and Zongzhi Li; 128(4), 301-13 (2002).
- Rakha, Hesham**
Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungho Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).
- Variable Power Vehicle Dynamics Model for Estimating Truck Accelerations. — Hesham Rakha and Ivana Lucic; 128(5), 412-9 (2002).
- Ran, Bin**
Dynamic Traffic Assignment with Rolling Horizon Implementation. — Bin Ran, Der-Horng Lee, and Michael Seong-II Shin; 128(4), 314-22 (2002).
- New Algorithm for a Multiclass Dynamic Traffic Assignment Model. — Bin Ran, Der-Horng Lee, and Michael Seong-II Shin; 128(4), 323-35 (2002).
- Rao, K. V. Krishna**
Survey Design for Studying Transit Access Behavior in Mumbai City, India. — Rajat Rastogi and K. V. Krishna Rao; 128(1), 68-79 (2002).
- Rastogi, Rajat**
Survey Design for Studying Transit Access Behavior in Mumbai City, India. — Rajat Rastogi and K. V. Krishna Rao; 128(1), 68-79 (2002).
- Razaqpur, A. G.**
Effects of Runway Deicers on Pavement Materials and Mixes: Comparison with Road Salt. — Y. Hassan, A. O. Abd El Halim, A. G. Razaqpur, W. Bekheet, and M. H. Farha; 128(4), 385-91 (2002).

Reid, John D.

Box-Beam Bursting Energy Absorbing Terminal. — John D. Reid, John R. Rohde, and Dean L. Sicking; 128(3), 287-94 (2002).

Roberts, Craig A.

Review of *Sensor technologies and data requirements for ITS* by Lawrence A. Klein. — Craig A. Roberts; 128(4), 392-3 (2002).

Rohde, John R.

Box-Beam Bursting Energy Absorbing Terminal. — John D. Reid, John R. Rohde, and Dean L. Sicking; 128(3), 287-94 (2002).

Ross, Hayes E.

Evaluation of Recycled Content Guardrail Posts. — Ali O. Atahan, Roger P. Bligh, and Hayes E. Ross; 128(2), 156-66 (2002).

Rouphail, Nagui M.

Field Evaluation of Lane Selection Strategies at Signalized Intersections. — Brandon L. Nevers and Nagui M. Rouphail; 128(3), 224-31 (2002).

Saka, Anthony A.

Closure to "Model for Determining Optimum Bus-Stop Spacing in Urban Areas" by Anthony A. Saka. — Anthony A. Saka; 128(6), 596-7 (2002).

Saksit, Khajohnsak

Determination of Left-Turn Yellow Change and Red Clearance Interval. — Chiu Liu, Lei Yu, Khajohnsak Saksit, and Hong S. Oey; 128(5), 452-7 (2002).

Santoni, Rosa L.

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Scarino, John H.

Discussion of "Soil Friction Restraint of Oblique Pipelines in Loose Sand" by Tung-Wen Hsu, Yuh-Jyh Chen, and Chun-Yin Wu. — John H. Scarino; 128(2), 198-9 (2002).

Schonfeld, Paul

Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).

Scott, Stephen H.

Hydraulic Transport of Fine and Coarse Sediment Mixtures in Pipelines. — Stephen H. Scott and Steven R. Abt; 128(1), 1-8 (2002).

Sebaaly, Peter E.

Investigation of Tire Contact Stress Distributions on Pavement Response. — Raj V. Siddharthan, N. Krishnamenon, Mohey El-Mously, and Peter E. Sebaaly; 128(2), 136-44 (2002).

Evaluation of Low-Temperature Properties of HMA Mixtures. — Peter E. Sebaaly, Andrew Lake, and Jon Epps; 128(6), 578-86 (2002).

Seneviratne, Prianka N.

Cost-Based Space Estimation in Passenger Terminals. — Kittu Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Shenoy, Aroon

Single-Event Cracking Temperature of Asphalt Pavements Directly from Bending Beam Rheometer Data. — Aroon Shenoy; 128(5), 465-71 (2002).

Shin, Michael Seong-II

Dynamic Traffic Assignment with Rolling Horizon Implementation. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 314-22 (2002).

New Algorithm for a Multiclass Dynamic Traffic Assignment Model. — Bin Ran, Der-Hong Lee, and Michael Seong-II Shin; 128(4), 323-35 (2002).

Shrivastava, Prabhat

Development of Coordinated Schedules using Genetic Algorithms. — Prabhat Shrivastava and S. L. Dhingra; 128(1), 89-96 (2002).

Sicking, Dean L.

Box-Beam Bursting Energy Absorbing Terminal. — John D. Reid, John R. Rohde, and Dean L. Sicking; 128(3), 287-94 (2002).

Siddharthan, Raj V.

Investigation of Tire Contact Stress Distributions on Pavement Response. — Raj V. Siddharthan, N. Krishnamenon, Mohey El-Mously, and Peter E. Sebaaly; 128(2), 136-44 (2002).

Sim, Y. P.

Optimal Vertical Alignment Analysis for Highway Design. — T. F. Fwa, W. T. Chan, and Y. P. Sim; 128(5), 395-402 (2002).

Sinha, Kumares C.

Development of Transportation Engineering Research, Education, and Practice in a Changing Civil Engineering World. — Kumares C. Sinha, Darcy Bullock, Chris T. Hendrickson, Herbert S. Levinson, Richard W. Lyles, A. Essam Radwan, and Zongzhi Li; 128(4), 301-13 (2002).

Simulation Model for Evaluating and Improving Effectiveness of Freeway Service Patrol Programs. — Raktim Pal and Kumares C. Sinha; 128(4), 355-65 (2002).

Sobanjo, J.

Rational Method for Selecting Seismic Waves for Pavement Evaluation. — K. Tawfiq, J. Armaghani, and J. Sobanjo; 128(6), 550-8 (2002).

Souleyrette, Reginald R.

Factors Related to More Severe Older Driver Traffic Crash Injuries. — Aemal J. Khattak, Michael D. Pawlovich, Reginald R. Souleyrette, and Shauna L. Hallmark; 128(3), 243-9 (2002).

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Stathopoulos, Antony

Modeling Duration of Urban Traffic Congestion. — Antony Stathopoulos and Matthew G. Karlaftis; 128(6), 587-90 (2002).

Strauss, Tim R.

Three-Dimensional Transportation Analysis: Planning and Design. — Said M. Easa, Tim R. Strauss, Yasser Hassan, and Reginald R. Souleyrette; 128(3), 250-8 (2002).

Subprasom, Kittu

Cost-Based Space Estimation in Passenger Terminals. — Kittu Subprasom, Prianka N. Seneviratne, and Heli K. Kilpala; 128(2), 191-7 (2002).

Subramanian, Chelakara S.

Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).

Tabora, Johan

Experimental Study of Breakaway Highway Sign Connections. — Jean-Paul Pinelli, Chelakara S. Subramanian, and Johan Tabora; 128(1), 17-20 (2002).

Tang, Yimin

Optimizing Work Zones for Two-Lane Highway Maintenance Projects. — Steven Chien, Yimin Tang, and Paul Schonfeld; 128(2), 145-55 (2002).

Tarawneh, Mohammed S.

Effect on Utilization of Auxiliary through Lanes of Downstream Right-Turn Volume. — Mohammed S. Tarawneh and Tarek M. Tarawneh; 128(5), 458-64 (2002).

Tarawneh, Tarek M.

Effect on Utilization of Auxiliary through Lanes of Downstream Right-Turn Volume. — Mohammed S. Tarawneh and Tarek M. Tarawneh; 128(5), 458-64 (2002).

Tawfiq, K.

Rational Method for Selecting Seismic Waves for Pavement Evaluation. — K. Tawfiq, J. Armaghani, and J. Sobanjo; 128(6), 550-8 (2002).

Tian, Zong Z.

Parallax Error in Video-Image Systems. — Zong Z. Tian, Michael D. Kyte, and Carroll J. Messer; 128(3), 218-23 (2002).

Tingle, Jeb S.

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Trani, Antonio

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungso Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Tsai, Wei K.

Faster Frank-Wolfe Traffic Assignment with New Flow Update Scheme. — Anthony Chen, R. Jayakrishnan, and Wei K. Tsai; 128(1), 31-9 (2002).

Tsohos, G. H.

Consideration of Fractals Potential in Pavement Skid Resistance Evaluation. — A. G. Kokkalis, G. H. Tsohos, and O. K. Panagoulis; 128(6), 591-5 (2002).

Utts, J. M.

Cluster Analysis for Optimal Sampling of Traffic Count Data: Air Quality Example. — D. A. Nemeier, J. M. Utts, and L. Fay; 128(1), 97-102 (2002).

Van Aerde, Michel

Estimating Vehicle Fuel Consumption and Emissions based on Instantaneous Speed and Acceleration Levels. — Kyoungso Ahn, Hesham Rakha, Antonio Trani, and Michel Van Aerde; 128(2), 182-90 (2002).

Vassallo, José M.

Modeling Road Maintenance Management and Financing. — José M. Vassallo and Rafael Izquierdo; 128(6), 559-67 (2002).

Wadhawan, Bikram

Jointly Estimated Cross-Sectional Mode Choice Models: Specification and Forecast Performance. — Daniel A. Badoe and Bikram Wadhawan; 128(3), 259-69 (2002).

Washburn, Scott S.

Speech Recognition for On-Site Collection of License Plate Data: Exploratory Application Development and Testing. — Scott S. Washburn; 128(6), 481-9 (2002).

Webster, Steve L.

Full-Scale Field Tests of Discrete Fiber-Reinforced Sand. — Jeb S. Tingle, Rosa L. Santoni, and Steve L. Webster; 128(1), 9-16 (2002).

Wei, Chienhung

Dynamic Bus Arrival Time Prediction with Artificial Neural Networks. — Steven I-Jy Chien, Yuqing Ding, and Chienhung Wei; 128(5), 429-38 (2002).

Wu, Chun-Yin

Closure to "Soil Friction Restraint of Oblique Pipelines in Loose Sand" by Tung-Wen Hsu, Yuh-Jyh Chen, and Chun-Yin Wu. — Tung-Wen Hsu, Yuh-Jyh Chen, and Chun-Yin Wu; 128(2), 199-200 (2002).

Wu, Qing-Song

Numerical Study on Traffic Flow with Single Parameter State Equation. — Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

Wu, Tong-Qiang

Numerical Study on Traffic Flow with Single Parameter State Equation. — Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

Yang, Hai

Multiclass Network Toll Design Problem with Social and Spatial Equity Constraints. — Hai Yang and Xiaoning Zhang; 128(5), 420-8 (2002).

Yu, Lei

Determination of Left-Turn Yellow Change and Red Clearance Interval. — Chiu Liu, Lei Yu, Khajohnsak Saksit, and Hong S. Oey; 128(5), 452-7 (2002).

Yuval, Ruth

Reformulation of Asphalt Cements for Paving. — Ilan Ishai and Ruth Yuval; 128(2), 111-22 (2002).

Zeng, Sanping

Efficient Dynamic Analysis of Multilayered System during Falling Weight Deflectometer Experiments. — Robert Liang and Sanping Zeng; 128(4), 366-74 (2002).

Zhang, Xiaoning

Multiclass Network Toll Design Problem with Social and Spatial Equity Constraints. — Hai Yang and Xiaoning Zhang; 128(5), 420-8 (2002).

Zhang, Yunlong

Review of *Transportation engineering basics* by A. S. Narasimha Murthy and Henry R. Mohle. — Yunlong Zhang; 128(5), 479 (2002).

Zhu, Zuo-Jin

Numerical Study on Traffic Flow with Single Parameter State Equation. — Zuo-Jin Zhu, Qing-Song Wu, Rui Jiang, and Tong-Qiang Wu; 128(2), 167-72 (2002).

